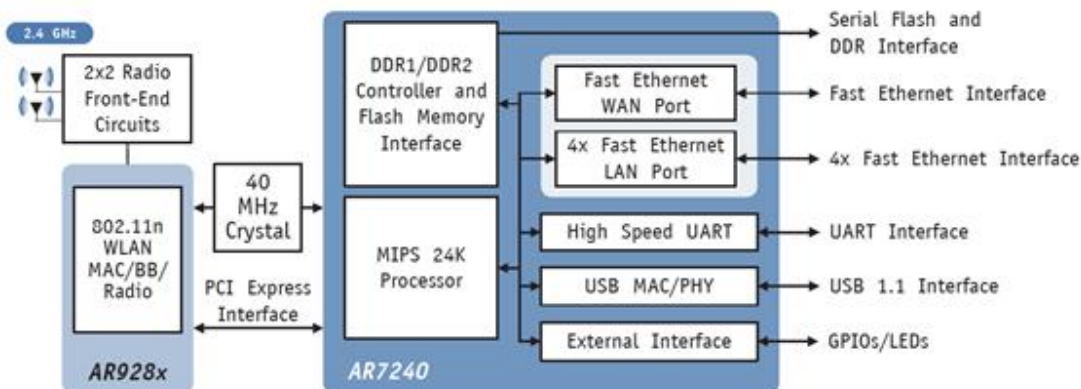


Atheros AR7240 Network Processor Introduction

AR7240 is a cost-effective network processor launched by [Atheros](#), a major wireless network chip manufacturer, in 2009. It is suitable for wireless AP, wireless router, gateway and other products. Even at this time, this chip is still active in the market, and we can see that a large number of wireless products on the market are using this chip. As far as I know, UBNT seems to have a special emotion for AR7240, and it can be seen in a large number of products.



The AR7240 includes a MIPS 24K core processor, a PCI-e Host host device interface, an integrated 5-port 100M Ethernet switch (MAC / PHY), a USB 1.1 MAC / PHY, and an SPI. External memory interface, DDR1 / DDR2 interface, a high-speed UART interface, and some GPIO.



The AR7240 network processor is a memory-centric architecture that works with the [Atheros](#) AR928x series of single-chip 802.11n MAC / baseband / RF chips to achieve superior 802.11 a / b / g / n wireless network performance.

AR7240 main parameters

- Integrated MIPS 24K, 32-bit processor core, clocked up to 400MHz
- 64K instruction cache and 32K data cache
- Integrated 100M Ethernet switch to achieve 4LAN + 1WAN
- Support 16-bit wide DDR1 / DDR2 memory, up to DDR1-400 / DDR2-400
- 1 SPI interface
- 1 USB 1.1 Host interface
- 1 high-speed serial port and multiple multiplexed GPIOs for LED control
- 1 x1 PCI-2 master device interface, can be used with AR928x series wireless network chips
- 1 JTAG interface
- 14 * 14mm LQFP-128 package

However, I would like to give readers some suggestions here. It is best not to use the AR7240 in new products, because the network port of this chip is very fragile and can be implemented using a similar AR7242 + PHY.

The PDF documents cited in this article can be accessed via the following links:

http://www.yuxict.com/Upload/download/1/AR7240_datasheet.pdf